AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

F = conversion factor, 0.001417 g H_2S/cubic meter (m^3)-ppm (8.846 × 10^{M8} lb H_2S/cubic foot (ft^3)-ppm).
Q_{sd} = volumetric flow rate of stack gas, dscm/hr (dscf/hr).
P = black liquor solids feed or pulp production rate, kg/hr (ton/hr).

(2) Method 16 of Appendix A–6 of this part must be used to determine the TRS concentration (C_{TRS}).

(3) Method 2 of Appendix A–1 of this part must be used to determine the volumetric flow rate (Q_{sd}) of the effluent gas.

(4) Process data must be used to determine the black liquor feed rate or the pulp production rate (P).

(5) For smelt dissolving tanks, in addition to the initial performance test required in this subpart and §60.8(a), you must conduct repeat TRS performance tests at intervals no longer than 5 years following the previous performance test using the procedures in paragraphs (e)(1) through (4) of this section.

(f) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) In place of Method 5 of Appendix A–3 of this part, Method 17 of Appendix A–6 of this part may be used if a constant value of 0.009 g/dscm (0.004 gr/dscf) is added to the results of Method 17 and the stack temperature is no greater than 204 °C (400 °F).

(2) In place of Method 16 of Appendix A–6 of this part, Method 16A, 16B, or 16C of Appendix A–6 of this part may be used.

(3) In place of Method 3B of Appendix A–2 of this part, ASME PTC 19.10–1981 (incorporated by reference—see §60.17) may be used.

§60.286a Affirmative defense for violations of emission standards during malfunction.

In response to an action to enforce the standards set forth in §§60.282a and 60.283a, you may assert an affirmative defense to a claim for civil penalties for violations of such standards that are caused by malfunction, as defined at §60.2. Appropriate penalties may be assessed if you fail to meet your burden of proving all of the requirements in the affirmative defense. The affirmative defense must not be available for claims for injunctive relief.

(a) *Assertion of affirmative defense.* To establish the affirmative defense in any action to enforce such a standard, you must timely meet the reporting requirements in paragraph (b) of this section, and must prove by a preponderance of evidence that:

(1) The violation:

(i) Was caused by a sudden, infrequent, and unavoidable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner; and

(ii) Could not have been prevented through careful planning, proper design or better operation and maintenance practices; and

(iii) Did not stem from any activity or event that could have been foreseen and avoided, or planned for; and

(iv) Was not part of a recurring pattern indicative of inadequate design, operation, or maintenance; and

(2) Repairs were made as expeditiously as possible when a violation occurred; and

(3) The frequency, amount, and duration of the violation (including any bypass) were minimized to the maximum extent practicable; and

(4) If the violation resulted from a bypass of control equipment or a process, then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and

(5) All possible steps were taken to minimize the impact of the violation on ambient air quality, the environment, and human health; and

(6) All emission monitoring and control systems were kept in operation if at all possible, consistent with safety and good air pollution control practices; and

(7) All of the actions in response to the violation were documented by properly signed, contemporaneous operating logs; and

(8) At all times, the affected source was operated in a manner consistent with good practices for minimizing emissions; and

(9) A written root cause analysis has been prepared, the purpose of which is to determine, correct, and eliminate the primary causes of the malfunction and the violation resulting from the

malfunction event at issue. The analysis must also specify, using best monitoring methods and engineering judgment, the amount of any emissions that were the result of the malfunction.

(b) *Report.* The owner or operator seeking to assert an affirmative defense must submit a written report to the Administrator with all necessary supporting documentation that explains how it has met the requirements set forth in paragraph (a) of this section. This affirmative defense report must be included in the first periodic compliance, deviation report or excess emission report otherwise required after the initial occurrence of the violation of the relevant standard (which may be the end of any applicable averaging period). If such compliance, deviation report or excess emission report is due less than 45 days after the initial occurrence of the violation, the affirmative defense report may be included in the second compliance, deviation report or excess emission report due after the initial occurrence of the violation of the relevant standard.

§ 60.287a Recordkeeping.

(a) The owner or operator must maintain records of the performance evaluations of the continuous monitoring systems.

(b) For each continuous monitoring system, the owner or operator must maintain records of the following information, as applicable:

(1) Records of the opacity of the gases discharged into the atmosphere from any recovery furnace or lime kiln using an ESP emission control device, except as specified in paragraph (b)(6) of this section, and records of the ESP secondary voltage and secondary current (or total secondary power) averaged over the reporting period for the opacity allowances specified in § 60.284a(e)(1)(ii) and (iv).

(2) Records of the concentration of TRS emissions on a dry basis and the percent of oxygen by volume on a dry basis in the gases discharged into the atmosphere from any lime kiln, recovery furnace, digester system, brown stock washer system, multiple-effect evaporator system, or condensate stripper system, except where the provisions of § 60.283a(a)(1)(iii) or (iv) apply.

(3) Records of the incinerator combustion temperature at the point of incineration of effluent gases which are emitted from any digester system, brown stock washer system, multiple effect evaporator system, or condensate stripper system where the provisions of § 60.283a(a)(1)(iii) apply and an incinerator is used as the combustion device.

(4) For any recovery furnace, lime kiln, or smelt dissolving tank using a wet scrubber emission control device:

(i) Records of the pressure drop of the gas stream through the control equipment (or smelt dissolving tank scrubber fan amperage), and

(ii) Records of the scrubbing liquid flow rate (or scrubbing liquid supply pressure).

(5) For any recovery furnace or lime kiln using an ESP control device:

(i) Records of the secondary voltage of each ESP collection field, and

(ii) Records of the secondary current of each ESP collection field, and

(iii) If used as an alternative to secondary voltage and current, records of the total secondary power of each ESP collection field.

(6) For any recovery furnace or lime kiln using an ESP followed by a wet scrubber, the records specified under paragraphs (b)(4) and (5) of this section.

(7) Records of excess emissions as defined in § 60.284a(d).

(c) For each malfunction, the owner or operator must maintain records of the following information:

(1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(2) Records of actions taken during periods of malfunction to minimize emissions in accordance with § 60.11(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

§ 60.288a Reporting.

(a) For the purpose of reports required under § 60.7(c), any owner or operator subject to the provisions of this